

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

- 4u5
C1
1. (Currently Amended) A driving method for driving an electro-optical device having a pixel arranged corresponding to an intersection where a scanning line and a data line cross, the pixel having a switching element, an electro-optical material and a storage capacitor, matrix of pixels in a plurality of driving fields to display an image with gray scale, the method comprising the steps of:
- dividing each driving field into a plurality of subfields; and
- supplying a scanning signal to the scanning line in each subfield; and
- feeding a binary signal for controlling the pixel to be in an ON state or an OFF state from the data line through the switching element to the electro-optical material and the storage capacitor, the storage capacitor holding the binary signal,
- and the binary signal setting the pixel to the ON state or the OFF state
- applying each pixel with a voltage that sets the pixels to an ON state on a subfield by-subfield basis or a voltage that sets the pixels to an OFF state on a subfield by-subfield basis so that a ratio of a period of voltage application time to set the pixels to the ON state to a period of voltage application time to set the pixels to the OFF state in each driving field is responsive to the gray scale level of the pixel.
2. (Currently Amended) The driving method for driving an electro-optical device according to claim 1, ~~of the subfields divided from one driving field having time lengths long enough so as to feed a different root-mean-square voltages voltage to different each subfieldssubfield.~~
3. (Currently Amended) A driving method for driving an electro-optical device having a pixel arranged corresponding to an intersection where a scanning line and a data line
- B1

cross matrix of pixels in a plurality of driving fields to display an image with gray scale, the method comprising the steps of:

dividing each driving field into a plurality of subfields;

setting each pixel to an ON state or an OFF state during a first subfield; and

controlling the pixel depending on a gray scale level of the pixel as to whether to remain in the ON state or the OFF state of the pixels during a subsequent subfield.

4. (Currently Amended) ~~The A driving method for driving an electro-optical device having a pixel, according to claim 3, each pixel being arranged so as to correspond~~ corresponding to an intersection where one of a plurality of scanning lines and one of a plurality of data lines cross in a plurality of driving fields to display an image with gray scale, the method comprising the steps of: ~~and being set to the ON state or to the OFF state depending on a voltage applied to the data line when the scanning line is supplied with a scanning signal;~~

dividing each driving field into a plurality of subfields;

feeding a binary signal for controlling the pixel to be in an ON state or an OFF state to the data line in a first subfield; and

feeding a binary signal for controlling the pixel depending on a gray scale level of the pixel as to whether to remain in the ON state or the OFF state to the data line in subsequent subfields

the scanning signal being supplied to the scanning lines on a subfield by-subfield basis; and

a binary signal for commanding the pixel to be set to the ON state or the OFF state being fed to the data line of the pixel when the scanning line of the pixel is supplied with the scanning signal.

5. (Currently Amended) A driving circuit of an electro-optical device for driving pixels in a plurality of driving fields, comprising:

a data line, a scanning line, a pixel electrode arranged corresponding to each
an intersection at which one of a plurality of where the scanning lines line and one of a
plurality of the data lines line cross, and having a switching element, an electro-optical
material, and a storage capacitor for controlling a voltage applied to each pixel electrode, the
driving circuit comprising;

a scanning line driving circuit that supplies the scanning line with a scanning signal that turns on the switching element in each of a plurality of subfields divided from one driving field; and

131
a data line driving circuit that supplies the data line of the pixel with a binary signal commanding controlling the pixel to be set to an ON state or an OFF state from the
data line through the switching element to an electro-optical material and the storage
capacitor, the storage capacitor holding the binary signal for a period during which the
scanning line of the pixel is supplied with the scanning signal, and

the binary signal being a command signal to set setting the pixel to the ON state or to the OFF state so that a ratio of a period of voltage application time to set the pixels to the ON state to a period of voltage application time to set the pixels to the OFF state in each driving field is responsive to a gray scale level of each the pixel.

6. (Currently Amended) A driving circuit of an electro-optical device for driving pixels in a plurality of driving fields, comprising:

a data line, a scanning line, and a pixel electrode arranged corresponding to
each an intersection at which one of a plurality of where the scanning lines line and one of a
plurality of the data lines line cross, and a switching element for controlling a voltage applied
to each pixel electrode, the driving circuit comprising;

a scanning line driving circuit that supplies the scanning line with a scanning signal ~~that turns on the switching element~~ in each of a plurality of subfields divided from one driving field; and

a data line driving circuit that supplies the data line ~~of the pixel~~ with a binary signal ~~for a period during which the scanning line of the~~ controlling the pixel ~~is supplied with the scanning signal,~~

~~the binary signal commanding the pixels~~ to be set to an ON state or an OFF state during a first subfield, and ~~commanding~~ controlling the pixels ~~pixel~~ as to whether to remain in the ON state or the OFF state during a subsequent subfield.

7. (Currently Amended) The driving circuit of an electro-optical device according to claim 65, the data line driving circuit further comprising:

a shift register that sequentially shifts and outputs a latch pulse signal, supplied at the start of a horizontal scanning period, in response to a clock signal;

a first latch circuit that sequentially latches the binary signal in response to the shifted signal provided by the shift register; and

a second latch circuit which latches the binary signal, latched by the first latch circuit, in response to the latch pulse signal while simultaneously outputting the latched binary signals to corresponding data lines.

8. (Previously Amended) The driving circuit of an electro-optical device according to claim 7, the first latch circuit simultaneously latching the binary signals, which are branched into a plurality of lines from a single line, in response to the shifted signal provided by the shift register.

9. (Previously Amended) The driving circuit of an electro-optical device according to claim 7, comprising a clock signal supply control circuit, the clock signal supply control circuit stopping supply of the clock signal to the shift register after the scanning line

driving circuit supplies all scanning lines with the scanning signal in one subfield, and restarting the supply of the clock signal at a start of a subsequent subfield.

10. (Currently Amended) An electro-optical device, comprising:

a data line, a scanning line, a pixel comprising having a pixel electrode
corresponding to each an intersection at which one of a plurality of where the scanning lines-
line and one of a plurality of the data lines line cross, a switching element, a storage capacitor-
that controls a voltage applied to each pixel electrode, and a counter electrode arranged to be
opposed to the pixel electrode;

a scanning line driving circuit that supplies the scanning line with a scanning
signal that turns on the switching element in each of a plurality of subfields divided from one
driving field of a plurality of driving fields; and

B1
a data line driving circuit that supplies the data line with a binary signal
controlling of the pixel to be in an ON state or an OFF state from the data line through the
switching element to an electro-optical material and the storage capacitor, the storage
capacitor holding the binary signal with a binary signal for a period during which the scanning
line of the pixel is supplied with the scanning signal,

the binary signal being a command signal to setsetting the pixels-pixel to an
ON state or to an OFF state so that a ratio of a period of voltage application time to set the
pixels-pixel to the ON state to a period of voltage application time to set the pixels-pixel to
the OFF state in each driving field is responsive to a gray scale level of the pixel.

11. (Currently Amended) An electro-optical device, comprising:

a data line, a scanning line, a pixel comprising a pixel electrode arranged
corresponding to each an intersection at which one of a plurality of where the scanning lines-
line and one of a plurality of the data lines line cross, a switching element that controls a

~~voltage applied to each pixel electrode, and a counter electrode arranged to be opposed to the pixel electrode;~~

~~a scanning line driving circuit that supplies the scanning line with a scanning signal that turns on the switching element in each of a plurality of subfields divided from one driving field of a plurality of driving fields; and~~

~~a data line driving circuit that supplies the data line of the pixel with a binary signal for a period during which the scanning line of the pixel is supplied with the scanning signal;~~

~~the binary signal commanding controlling the pixel to be set to an ON state or an OFF state during in a first subfield, and commanding controlling the pixel depending on a gray scale level of the pixel as to whether to remain in the ON state or the OFF state of the pixel during in subsequent subfield.~~

12. (Currently Amended) The electro-optical device according to claim 11, the binary signal being shifted in level in response to a level of a voltage applied to the counter electrode.

13. (Previously Amended) The electro-optical device according to claim 12, an element substrate on which the pixel electrode and the switching element are formed being fabricated of a semiconductor substrate, and

the scanning line driving circuit and the data line driving circuit being produced on the element substrate, and the pixel electrode having reflectivity.

14. (Previously Amended) Electronic equipment comprising the electro-optical device according to claim 11.